

Chapter 13: Recommended Strategies and Policies for Economic Sustainability

The research and analysis for the Economic Sustainability Plan has identified many important issues, but three key issues come up repeatedly in discussions and underlie most of the recommendations. The first issue concerns the current status and future of agriculture, recreation, and tourism as important economic drivers in the Delta, and their role in defining and enhancing the Delta as a unique place. The second critical issue deals with the future of the Delta levee system, the critical infrastructure that supports the Delta economy and numerous state interests in the Delta. The third issue is the socio-economic sustainability of Delta communities and the challenges facing its historic Legacy Communities.

Although the focus of this plan is the Delta, it is also a part of on-going statewide planning initiatives related to the Delta's water resources and ecosystem. The plan recommends many specific actions where the state's coequal goals of water supply reliability and ecosystem restoration are consistent with the requirement to restore and enhance the Delta. However, a small number of the water supply and ecosystem proposals create large conflicts with economic sustainability and are not recommended in the plan. A final set of recommendations is for potential medium-term actions that in many cases need additional refinement and definition before implementation or recommendation for the plan.

Three Key Issues

1. Agriculture is the main economic driver in the Delta. Recreation and tourism has the most growth potential. Modest agricultural impacts could be offset by recreation economy gains. However, even with its growth potential, the magnitude of growth in recreation and tourism cannot replace agriculture's contribution. Thus, the loss of agricultural productivity in the Delta to pursue water supply and ecosystem goals must be limited.

Research for this plan found that a dollar of crop production in the Delta has roughly double the regional employment and income impacts of a dollar of recreation and tourism spending in the Delta. This result is important for economic sustainability since many proposals to change the Delta would reduce agricultural production while potentially increasing recreation and tourism. The lower economic impact of recreation and tourism spending is because fuel and retail purchases dominate expenditures for the types of recreation and tourism that are currently available in the Delta, and these local expenditures on goods that are typically produced elsewhere have relatively low multiplier effects on the regional economy.

While recreation trips to the Delta are a significant contributor to the Delta economy and are expected to increase, increasing the economic impact of tourism spending requires increasing spending per trip to the Delta and the local economic impact of spending that does occur. This requires diversification through new investment in high value-added, land-based tourist services that generate more local income and jobs than retail and fuel expenditures. A successful strategy would require significant new investment in hospitality enterprises within the Delta, and also stimulate investments needed to sustain and enhance the large existing economy associated with Delta boating. This is a difficult challenge given the market and regulatory constraints of operating in the Delta.

This plan offers some strategies to support this transition, but it is important to have realistic expectations of the growth potential. In the baseline scenario, recreation and tourism spending

is projected to grow about \$80 million, 30 percent over the next 40 years. Successful efforts to expand and enhance tourism and recreation experiences could consequently increase this by another \$30 million. However, increasing day trips for wildlife viewing and other ecologically-based activities is unlikely to generate large gains to in-Delta economic activity because of the low economic impact of such visitors, and could potentially increase the strain on local transportation and public safety services provided by local governments. Some of the proposed changes to the Delta could also reduce the quality of boating and alter the scenic and rural character of the Sacramento River corridor, and thereby could significantly decrease recreation and tourism spending.

On the agricultural side, supporting the high-value processing tomato and wine grape crops is critically important to the regional economy because of the local value-added manufacturing industries associated with these crops, and the potential for significant growth in local winery capacity and direct sale of product. However, these crops are generally considered to be less wildlife friendly, and significant expansion could be in conflict with ecological restoration goals in the Delta. The Delta's lower-value field and pasture crops support the regionally important dairy and cattle industries, and although alternative animal feed sources are available, they have become increasingly scarce and costly in recent years.

Given the potential and challenges of increasing the Delta's tourism economy, this plan recommends a firm cap on the total decline in Delta agriculture due to actions to further the coequal goals of water supply reliability and ecosystem restoration. The cap would include both revenue and acreage limits, and limits on the geographic distribution of impacts. For example, overly concentrating agricultural costs in the lower-income south Delta region would be undesirable if most recreation/tourism gains occurred in north and west delta. These limits could be increased in the future, but only if the efforts to improve recreation and tourism can be proven to be successful and have reached specific and measurable targets. Recreation and tourism goals could be measured by visits, employment, and sales tax revenues in tourism-oriented enterprises, new investment, enterprise counts, and other metrics.

2. The Delta Levee System is the key infrastructure that supports the Delta economy and significant state and regional economic interests.

Of the 460 miles of the core non-project levees in the Primary Zone of the Delta, only about 50 miles clearly fall below FEMA's Hazard Mitigation Plan (HMP) "standard" and 100 miles or more are already at or about the Corps of Engineers Delta-specific PL 84-99 standard. It has been the goal of the State and federal governments, working through the Department of Water Resources (DWR), the U.S. Army Corps of Engineers (USACE), and the local reclamation districts, to meet the PL 84-99 standard since 1982 when DWR and USACE produced a joint report on the Delta levees which recommended the basis for this standard. Funds currently in the pipeline should bring the Delta levees close to achieving this goal. When these funds have been expended, more than \$698 million will have been invested in improvements to the Delta levees since 1973. These improvements have created significantly improved Delta levees through modern engineering and construction, making obsolete the historic data that is still sometimes used for planning or predicting rates of levee failure.

Three approaches can help all jurisdictions and planners further reduce the risks resulting from the failure of the Delta levees. These approaches are: (1) build even more robust levees, (2) improve both regular maintenance and monitoring and flood-fighting and emergency response following earthquakes, and (3) improve preparedness for dealing with failures after they occur. With regard to the first approach, the big question with respect to the core Delta levees is not

whether they should be improved to the Delta-specific PL 84-99 standard, but whether they should be improved to a higher standard in order to address hazards posed by earthquakes and sea-level rise in addition to floods. These improvements would be advantageous not only for flood control and protection against earthquakes and sea-level rise, but because they also would allow for planting vegetation on the water side of the levees—an essential component of Delta ecosystem repair. Levees improved beyond the PL 84-99 standard would have wider crowns to provide for two-way traffic and could be further widened at selected locations to allow investment in new tourist and recreational facilities out of the statutory floodplain. Improvement of core levees to this higher standard would cost approximately \$1–2 billion. Three broad sources of funding are identified in this report.

3. The socioeconomic sustainability of the Delta Primary Zone and Legacy Communities face difficult challenges.

Economic opportunities for residents of the Primary Zone are limited for many reasons. For example, the population base is aging and leaving the workforce at an increasing rate, and a younger productive working generation is unable to step in to fill the gaps because of extremely limited housing options. Only about one in ten employees working in the Primary Zone also lives there. Without sufficient workforce housing, Delta employers must recruit non-local employees who must drive long distances to work, thereby compromising “sustainability” from an environmental standpoint.

Furthermore, a strict and multi-layered regulatory framework places limits on economic development opportunity. With numerous government agencies overseeing land use in the Legacy Communities, permitting new projects is frequently a costly and lengthy process. This aging and occasionally sub-standard building stock needs improvement, potentially utilizing redevelopment of existing buildings and/or a limited amount of new development in order to accommodate visitor- and local-serving uses that are important to enhancing the economic profile of the region.

Recommended Actions for Economic Sustainability

The following near-term actions are recommended. All these actions are consistent with the coequal goals and are within the limits required to protect economic sustainability.

- **Develop measurable targets for recreation and tourism and agricultural sustainability to track performance over time.** A key first step in developing recreation targets is to update visitation surveys with additional primary data collection on who visits the Delta, where they come from, what they do, what they would like to do more of, and how much they spend when doing it. Primary data for recreation and tourism has not been collected in more than 15 years, and primary data on non-boating or non-fishing related recreation does not exist. This data is crucial for future recreation planning and marketing.
- **Establish a firm cap on Delta agricultural losses caused by actions to increase export water supply reliability and habitat conversions.** Considerable improvements to satisfy the coequal goals can be made while satisfying this constraint. The cap could be reevaluated in 10 years if an evaluation of recreation and tourism indicators show this sector is exceeding the projections in the ESP.

- **Implement strategies to stimulate offsetting recreation economic returns.** These strategies would include the actions that follow.
- **Designate the Delta as a National Heritage Area (NHA).** This recommendation is contingent on the outcome of the Delta Protection Commission feasibility study. If the feasibility study does not recommend an NHA for the Delta, another facilitator organization should be established.
- **The Delta Investment Fund should be established and used strategically to implement the recreation and tourism enhancement strategies.** The following priorities and strategies are recommended for the use of the fund.
 - Provide ongoing operations, administrative, and marketing funding for National Heritage Area management entity or other facilitator organization.
 - Provide funding for planning and development of focal point complex areas and catalyst features, especially those close to Legacy Communities.
 - Provide funding for planning, development, and marketing of smaller dispersed recreation facilities, including those in partnership with State Parks and other public agencies and associated with habitat restoration areas
- **Create flood bypass and habitat improvements in the Yolo bypass, near the confluence of the Mokelumne and Cosumnes River, and for the San Joaquin River near Paradise Cut.** In the south Delta an alternative plan developed collaboratively between environmental groups and local stakeholders is recommended as an alternative to the more expansive plans outlined in the draft Bay Delta Conservation Plan (BDCP). The Yolo bypass enhancements should consider current efforts by Yolo County to develop an alternative that reduces agricultural conflicts from the draft BDCP proposals. In addition, these ecological and flood-control investments should be designed with facilities and other considerations required for enhanced recreational opportunities.
- **Improve core, non-project Delta levees to the PL 84-99 standard by 2015.** This engineering standard has been developed and supported by numerous studies, and current proposals to limit Delta levee goals to the HMP standard subject to island by island cost-benefit analysis should be rejected. This target is attainable with current bond funds, will increase water supply reliability, and will leverage the substantial benefit of support from the Army Corps of Engineers in the event of future levee breaks. Only a few small islands such as Fay, Quimby, and Dead Horse might be considered for exemption from this goal.
- **Pursue water quality improvements such as municipal wastewater upgrades and programs to eliminate invasive plants.**
- **Initiate a process to streamline local, State, and federal regulations and permitting.**
- **The Stewardship Council should not increase regulation of “covered actions” for industries it is trying to enhance in the Delta.** Exemptions should be made for needed investments in agriculture, recreation, and tourism.
- **Transfer responsibility for coordination of regional emergency management and response from the State to a regional agency and place much more emphasis on**

preventative maintenance and inspections, flood-fighting and emergency response following earthquakes, rather than preparing for dealing with breaches and flooded islands.

- **Create a Delta and/or Legacy Communities “brand” to enhance awareness.** The agricultural products, attractions, and communities of the Delta should be marketed strategically in order to raise the stature of the region and encourage added visitorship. This should include promoting the emerging agri-tourism industry—including wine and local foods—as a major economic development theme of the region.
- **A “Facilitator Organization” should manage economic sustainability efforts in the Legacy Communities and throughout the Primary Zone.** An overarching entity for economic development and community reinvestment should plan, coordinate, and participate in the implementation of the Economic Sustainability Plan. The Facilitator Organization would ensure that strategic actions, such as marketing efforts and economic development, are implemented in a systematic, efficient, and consistent fashion throughout the Legacy Communities and Primary Zone. A National Heritage Area could help with this goal.
- **Catalyst development projects at specific opportunity sites in the Legacy Communities must be analyzed, refined, and prioritized.** The ESP considers a number of strategic actions for the communities of Clarksburg, Walnut Grove, and Locke and includes a review of key opportunity sites which could be candidates to house new development and/or redevelopment. These initiatives and opportunities should be refined over time, and strategic actions for bringing them on line should be carefully considered.

Medium-Term Actions and Actions that require further study and development. These are mostly medium-term (5-15 year) strategies that could be consistent with Delta economic sustainability and the coequal goals. Several require additional development and evaluation before they can be recommended in the plan.

- **Improving Levees Beyond PL 84-99 to increase flood and earthquake protection, to prepare for possible sea-level rise, and to better protect Legacy Communities.** Upgrades beyond PL 84-99 are the appropriate place to consider implementing island-by-island life-cycle cost-benefit analyses. Seismic improvements in the west Delta and improvements to increase protection of Legacy Communities are likely to have the highest funding priorities. While this is a longer-term program, planning should be initiated immediately.
- **Alternative water conveyance proposals such as a 3,000 cfs tunnel, locating water supply intakes further downstream in the west Delta, and other proposals under consideration by the BDCP to improve water conveyance.** All of the alternative proposals should significantly reduce negative impacts on the Delta economy compared to 15,000 cfs isolated conveyance, but the impacts could still be substantial and further analysis is required.
- **Wildlife-friendly agricultural easements.** This strategy is in the second category because of the large area, 32,000 acres, targeted in the BDCP and the lack of detail. It could create large agricultural impacts, but could also have small agricultural impacts and offsetting recreational values. Further refinement and development is needed.

- **Channel margin habitat and set-back levees.** Like the easements, the costs and benefits of this strategy depend on implementation. While there are potential enhancements to the environment and recreation, there are concerns about existing recreation providers along the levees, including marinas, as well as historic homes and agricultural support structures that could be impacted.
- **Incentives or programs to implement subsidence-reversing agriculture or carbon sequestration on deeply-subsided central Delta islands.** Additional study and development is needed.
- **A tidal habitat program with lower acreage targets, especially in the south Delta.** The expansive BDCP targets for tidal habitat are not recommended due to multiple concerns with agricultural land loss, municipal and industrial water quality, mosquito vector control, and other local concerns. However, individual projects and a more limited overall program should be considered.
- **Evaluate progress towards achieving recreation and tourism development goals.** Benchmarks and new data for recreation and tourism established in the short-term recommendations need to be regularly updated and evaluated.

The following proposed actions to further the coequal goals are not recommended because they conflict significantly with economic sustainability.

- **15,000 cfs isolated tunnel conveyance is inconsistent with economic sustainability.** This project would have significant negative effects on all aspects of the Delta economy. There are unacceptably high risks surrounding the financial feasibility, environmental impacts, and operations of the project. There are many alternative options for increasing water supply reliability, and the large cost of isolated conveyance could drain resources that could support the state policy of reducing reliance on the Delta.
- **Large areas of tidal marsh in the south Delta is inconsistent with economic sustainability.** A much smaller and better-targeted program could significantly reduce conflicts and potentially be consistent with economic sustainability.
- **A large area of open water in the Central Delta caused by the permanent flooding of several contiguous islands is inconsistent with economic sustainability.** Although the agricultural value of the islands does not justify levee investments, this strategy would harm recreation and increase flood risk on adjacent islands for relatively small savings in levee investment costs.